

SIM P-lead troubleshooting

Note:

- SIM P-lead voltage, resistance, and signal values are measured with the P-lead disconnected from the P-lead stud on the SIM.
- Tach 2 outputs are measured with the P-lead connected to the P-lead stud on the SIM.

P-lead trouble shooting

Input Voltage*	Engine Off	Running at 800 RPM
14.2	10.9 volts	11.1 volts
28.2	22.5 volts	22.65 volts

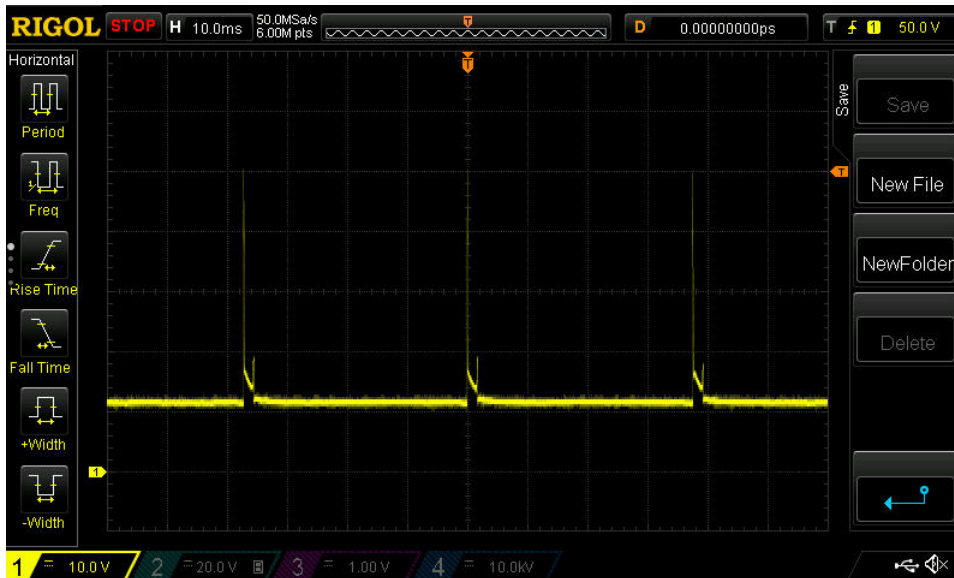
*Measurements taken using handheld Fluke multimeter

P-lead Resistance measurements

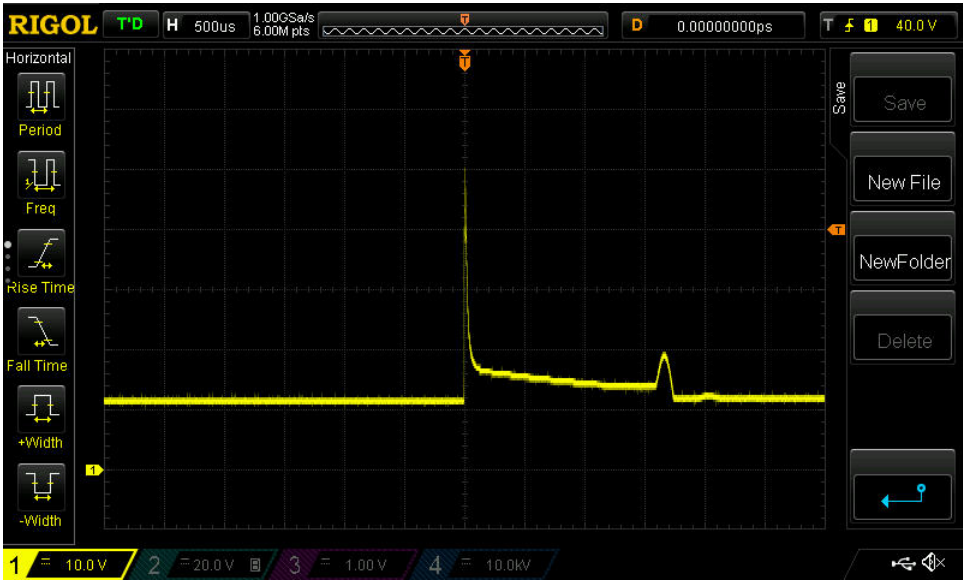
Positive (red) meter lead	Negative (black) meter lead	Expected Results
P-lead post	Corner Post (ground)	Open
Corner Post (ground)	P-lead post	260K ohms

Signals below taken using Oscilloscope

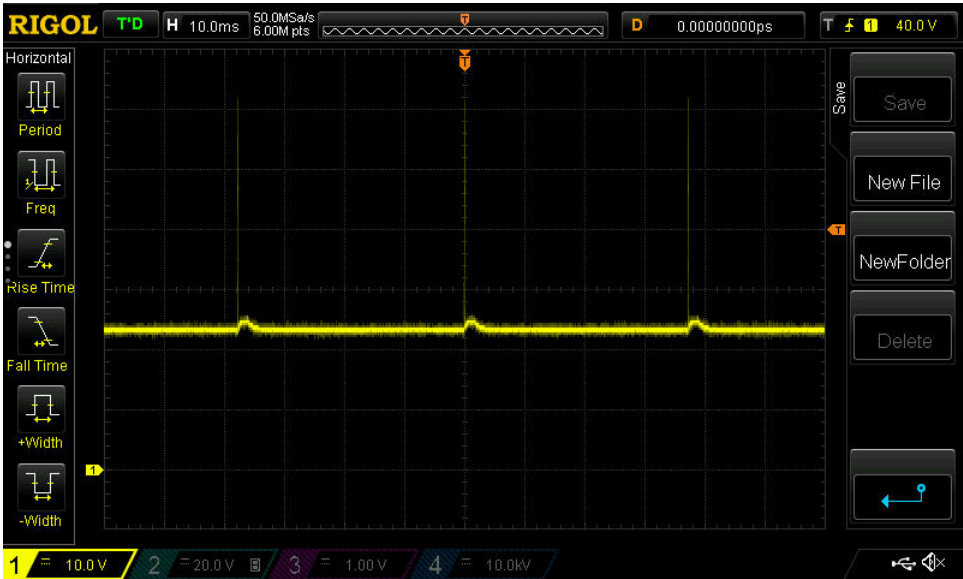
P-lead signal at 800 RPM & 14.2



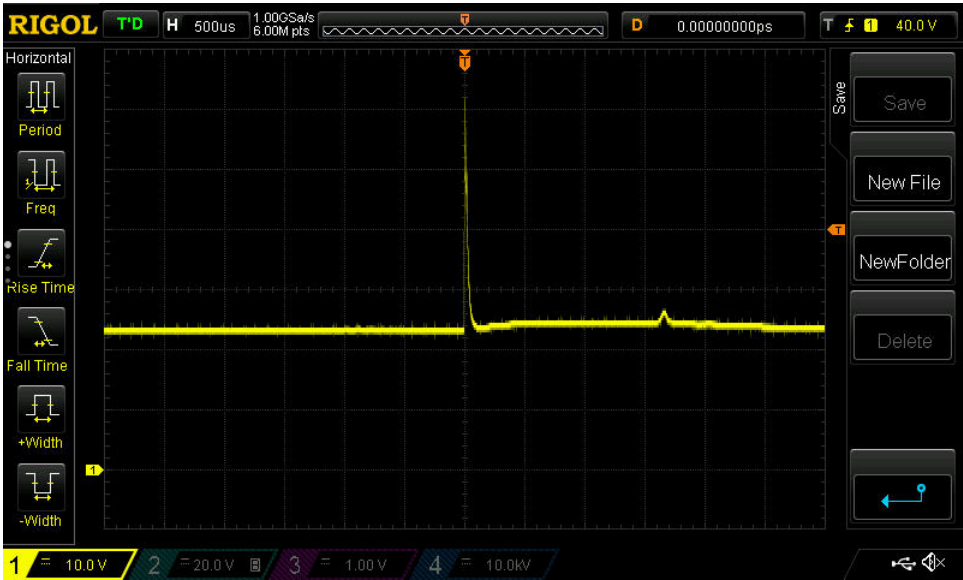
P-lead signal at 800 RPM & 14.2 volts (zoomed in)



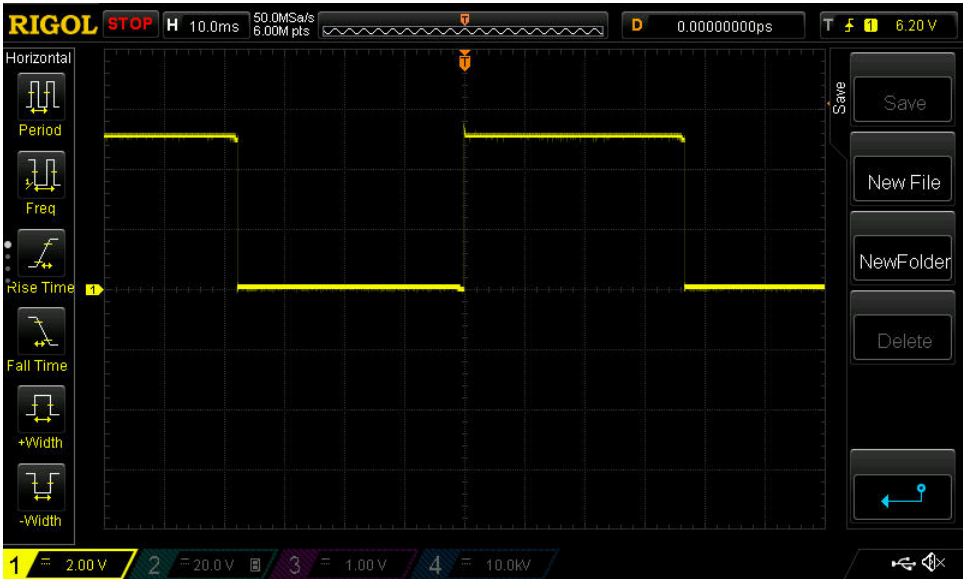
P-lead signal at 800 RPM & 28.2 volts



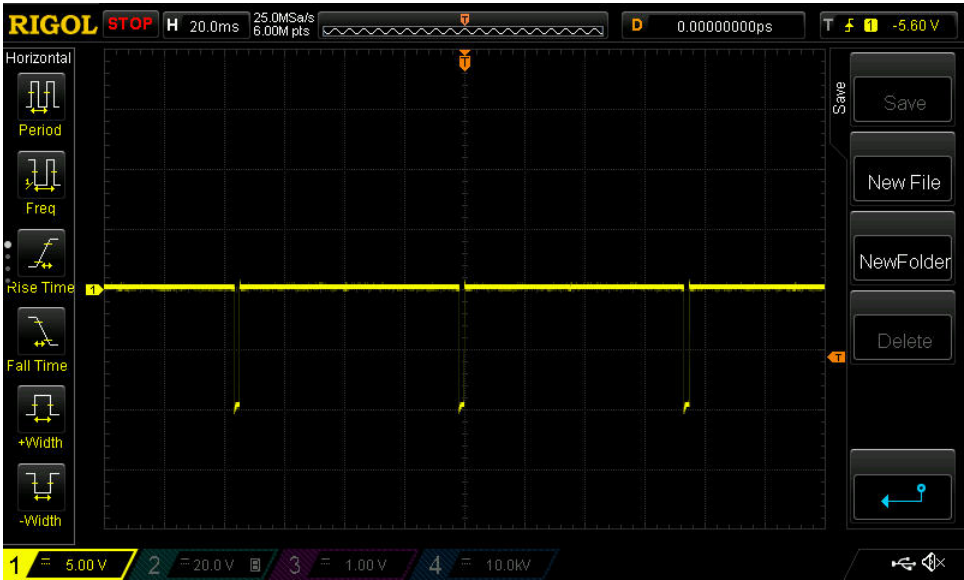
P-lead signal at 800 RPM & 28.2 volts (zoomed in)



Tach 2 0-5-volt output



Tach 2 Horizon Output



Pulses per revolution

4 cylinder – 1 pulse per revolution

6 cylinder – 1.5 pulses per revolution